THE ADOPTION OF INTERNET-ONLY BANK IN TERMS OF BENEFITS AND DIFFERENTIATED SERVICES

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Abstract: The purpose of this study is to analyze the adoption of internet-only bank in Korea in terms of benefits (functional, social, experiential, economic benefits) and differentiated services (customization and service diversity). Data was collected using an online and offline survey of 117 internet-only bank users and analyzed the data using structural equation model (SEM). The results of empirical analysis using SmartPLS show that functional benefits, experiential benefits, and customization are significantly related to the user's satisfaction, but economic benefits, social benefit, and service variety are not. This study has the significance in that it examines the user's attitude toward internet-only bank in terms of benefits and differentiated services while other studies analyzed banking services focusing on the attributes of banking channel itself.

Keywords: Internet-only Bank, Benefits, Differentiated services

Introduction

With the advent of internet banking, a large part of the services that are offered by banks can be provided online as well and many banks are closing offline branches and concentrating on improving online channels (Jun, 2017). Even more banks that use internet as the only channel of banking services has come to exist, which called 'internet-only bank'. Internet-only bank do not have any physical infrastructure resulting in costs savings. Instead, they invest in high end computer infrastructure that allows them to serve their customers in better and faster ways (Kim and Kim, 2018). Internet-only bank is a kind of self-service bank targeting small-scaled retail finance. Internet-only bank is providing services only through the internet and limited call center services are provided without face-to-face channel. As a mean to encourage development of fintech internet-only bank has emerged in Korea (Park, 2017). Two internet-only banks in Korea, KaKao Bank and K-Bank have started their operation in 2007. As of August 2017, 3.07 million accounts were opened in Kakao Bank and 490,000 accounts in K-Bank. When it comes to the amount of deposits and loans, Kakao Bank has 1,409 billion Won as deposits and 1,958 billion Won as loans while K-Bank has only 800 billion Won as deposits and 650 billion Won as loans (Park, 2017). The introduction of internet-only banks in Korea has decreased the market price of financial products and banking services resulting in causing healthy competition in banking industry.

Internet-only bank creates customer value by providing time optimization, immediate and customized information, fun and instant connectivity, great convenience and interactivity (Park, 2017). That is, customer use internet-only bank due to the various benefits compared with internet banking and mobile banking which are provided by traditional banks. Benefits are the personal values consumers attach to the product or service attributes and they are often linked to fairly basic motivations of purchasing (Keller, 2007). While prior banking-related studies have focused on the attributes of banking channel itself, this study intends to examine the adoption of internet-only bank in terms of benefits (functional, social, experiential, economic benefits) and differentiated services (customization and service diversity) as well.

Theoretical background

Several studies analyzed banking services and associated factors that influence consumers' adoption of it using a specific adoption theory or an extension of it, such as TAM (Technology Acceptance Model), IDT (Innovation Diffusion Theory), and UTAUT (Unified Theory of Acceptance and Use of Technology) (Aijaz and Heikki, 2015). They usually focused only on the attributes of banking channel and neglected the customer's subjective perception of benefits which banking services provide (Jun, 2017). However, it is necessary to investigate the relationship between the attitude and the usage in terms of user's subjective value, which are user's benefits, because customer has a tendency to use any service to get desirable benefits rather than to get attributes.

Benefits are the desirable consequences consumers seek when they buying and using products or services. Consumers don't buy and use products or services to get attributes; rather they think about products or services in terms of desirable and undesirable consequences - benefits (Peter and Olson, 1987). Benefits have been adopted by some studies on smart phone and mobile applications (Jun, 2017; Keller, 2007; Kwon, 2015; Noh and Hwangbo, 2016; Woo et al., 2013; Yim et al., 2016). Benefits can be distinguished into several categories according to the underlying motivations to which they relate (Keller, 2007; Peter and Olson, 1987). In this study benefits are categorized into 4; functional benefit, experiential benefit, social benefit, and economic benefit by adapting Jun's study (Jun, 2017; Jun, 2019).

Service variety and customization are also important factors of consumer's attitude. Broad range of products and services is one of significant predictor of consumer's motivations (Jun, 2018) and customized services are significantly related to the consumer's attitude and satisfaction (Jun, 2016).

Table 1: Affecting factors of internet-only bank

Factor	Construct	References
Functional benefit	Intrinsic advantages of product or service consumption and usually correspond to the product related attributes	Jun (2017), Yim et al. (2016), Kwon (2015), Noh and Hwangbo (2016)
Experiential benefit	Extrinsic advantages of product or service consumption such as social approval and personal expression	
Social benefit	Benefits relate to what it feels like to use the product or service such as sensory pleasure	
Economic benefit	Cheaper price and cost compared with other channels	
Service variety	Broad range of services	
Customization	Customized services	

Research model and empirical analysis

Research model and hypotheses

The primary purpose of this paper is to investigate the affecting factors of attitude, and usage of internet-only bank as Figure 1.
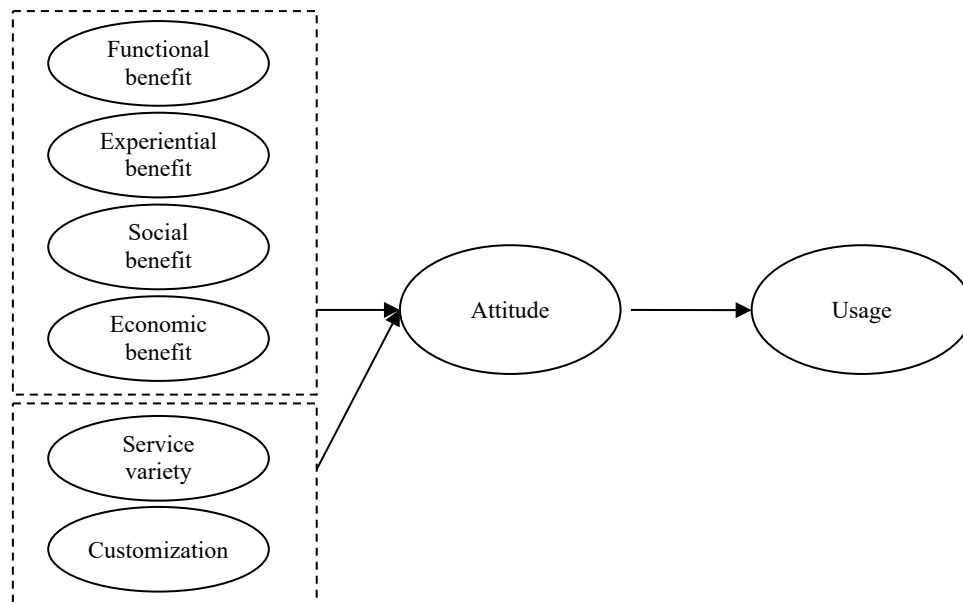
Figure 1. Research model

Based on prior studies which are mentioned in theoretical background benefits (functional, social, experiential, economic benefits) and differentiated services (customization and service diversity) are identified as affecting factors and following hypotheses are established as Table 2.

Table 2: Hypotheses

Hypotheses	Content
H1	Functional benefits will have a positive effect on attitude toward internet-only bank.
H2	Experiential benefits will have a positive effect on attitude toward internet-only bank.
H3	Social benefits will have a positive effect on attitude toward internet-only bank.
H4	Economic benefits will have a positive effect on attitude toward internet-only bank.
H5	Service variety will have a positive effect on attitude toward internet-only bank.
H6	Customization will have a positive effect on attitude toward internet-only bank.
H7	Attitude toward internet-only bank will have appositive effect on intention to re-use.

Empirical analysis

A questionnaire was used to collect data for this study targeting the internet-only bank users in Korea. The instruments measuring the constructs were adapted from the extant literature. The items were measured on a 5-point Likert scale using from 1 ('strongly disagree') to 5 ('strongly agree').

117 responses were used as a basis for the findings of this study. 76% of respondents use internet-only bank more than 1 time in a week. 0ver 70% of respondents use balance check service and transfer service regularly and frequently.

SEM (Structural Equation Model) was used for empirical test using SmartPLS. PLS is an extremely powerful multivariate analysis technique that is ideal for testing structural models with latent variables. This is a convenient and powerful statistical technique considered appropriate for many research situations (Henseler et al., 2009), suitable for studying complex models with numerous constructs (Chin, 1998).

The measurement model was assessed for construct reliability, indicator reliability, convergence validity, and discriminant validity. Table 3, 4 lists the average variance extracted (AVE), composite reliability (CR), factor loadings, and variable correlations. As shown in the table, the measurement model results indicate that the model has acceptable construct reliability (Straub, 1989), indicator reliability (Churchhill, 1979), convergence validity (Chin, 1998; Fornell & Lacker, 1981), and discriminant validity (Fornell & Lacker, 1981), ensuring that the constructs are statistically distinct and can be used to test the structural model.

Table 3: Confirmatory factor analysis

Construct	Factor loadings	Composite Reliability	AVE
Functional benefit	0.831	0.894	0.629
	0.815		
	0.798		
	0.857		
	0.648		
Experiential benefit	0.913	0.954	0.874
	0.951		
	0.939		
Social benefit	0.642	0.816	0.602
	0.734		
	0.924		
Economic benefit	0.776	0.812	0.685
	0.876		
Service variety	0.728	0.878	0.707
	0.911		
	0.872		
Customization	0.875	0.929	0.813
	0.909		
	0.919		
Attitude	0.842	0.909	0.771
	0.937		
	0.852		
Usage	0.978	0.978	0.956
	0.977		

Table 4: Discriminate validity

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Functional benefit(1)	**(0.629)**							
Experiential benefit(2)	0.492	**(0.874)**						
Social Benefit(3)	0.274	0.353	**(0.602)**					
Economic benefit(4)	0.523	0.295	0.240	**(0.685)**				
Service variety(5)	0.210	0.384	0.227	0.213	**(0.707)**			
Customization(6)	0.435	0.421	0.293	0.420	0.319	**(0.813)**		
Attitude(7)	0.641	0.561	0.373	0.463	0.245	0.580	**(0.771)**	
Usage(8)	0.508	0.392	0.076	0.320	0.232	0.445	0.513	**(0.956)**

The analysis of hypotheses and constructs' relationships were based on the examination of standardized paths using the bootstrap resampling method (Chin, 1998; Henseler et al., 2009). The results are summarized in Table 5. Functional benefit (β = 0.343, t-value = 3.841), experiential benefit (β = 0.229, t-value = 2.475), and customization (β = 0.284, t-value = 3.0788) were found to be significantly related to consumer's attitude, but social benefit (β = 0.107, t-value = 1.405), economic benefit (β = 0.082, t-value = 0.899), and service variety (β = -0.047, t-value = 0.565) were not. Consumer's attitude also has positive effect on usage (β = 0.513, t-value = 6.649). According to the values given in Table 4, hypotheses 1, 2, 6, 7 are supported but hypotheses 3, 4, 5 are not supported

Table 5: Results of hypotheses testing

	Path	Estimate	t-value	Result
H1	Functional benefit → Attitude	0.343	3.841	Accept
H2	Experiential benefit → Attitude	0.229	2.475	Accept
H3	Social benefit → Attitude	0.107	1.405	Reject
H4	Economic benefit → Attitude	0.082	0.899	Reject
H5	Service variety → Attitude	-0.047	0.565	Reject
H6	Customization → Attitude	0.284	3.078	Accept
H7	Attitude → Usage	0.513	6.649	Accept

Conclusion

Internet-only bank means a bank that utilizes internet as the primary sales channel instead of establishing offline branches for face-to-face respond as the traditional bank does. In 2017, two internet-only banks in Korea, Kakao Bank and K-Bank have started their operation.

The launch of internet-only banks has brought many changes. As the existing commercial banks and internet-only banks have started the infinite competition, the maintenance of relationships with customers or the creation of new customers is important (Kim and Kim, 2018). For this, it is meaningful to understand the consumer's attitude toward of internet-only bank. Therefore, this study examined the effecting factors of internet-only bank in terms of benefits and differentiated services.

The results of empirical analysis show that functional benefit, experiential benefit, and customization are significantly related to the consumer's attitude, but social benefit, economic benefit, and service diversity are not. First of all, functional benefit such as quickness, easiness, trust, and effectiveness of internet-only bank was found to be the most important factor for consumers to use internet-only bank. It implicates that consumers appreciate internet-only bank as easier and convenient banking channel with trust. As internet-only bank which use smart phone becomes routine service in daily life, social benefit and economic benefit are not important factors for consumers any more. Instead, personalized and customized services play a great role in consumer's attitude toward internet-only bank. Customized services which make fun and useful to consumers affect the consumer's banking behavior positively. That's why experiential benefit and customization were found to be related to the consumer's attitude. Therefore, banking service provider should consider that banking service be much easier and quickly with trust and fun to consumers and provide more useful customized services with consumers.

This paper has the originality in that it examines the affecting factors of internet-only bank in terms of benefits and differentiated services while prior studies have focused on the attributes of banking channels. Further study should consider the difference among service types and device which use internet-only bank.

Acknowledgements

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